

LIKELIHOOD OF TRANSPLANTATION

31 March 1998

The proportion of all dialysis patients on the transplant list has steadily declined from 36% (1995) to 30% (1998). But, somewhat unexpectedly a similar decline has occurred in the age group <55 years old, from 62% (1995) to 54% (1998). Queensland, South Australia, Western Australia and Northern Territory recording a greater fall than New South Wales/ACT and Victoria. Queensland has the lowest proportion of dialysis patients awaiting transplantation of the major States.

The Northern Territory transplant list related to dialysis patients <55 years has been lower than all States for the last few years, which may reflect the high rate of concomitant multi-system disease, especially of cardiac and respiratory systems. Undoubtedly determination of the appropriate treatment allocation for this region remains a vexed question.

The high transplantability of dialysis patients in New South Wales/ACT reflects a higher proportion of dialysis patients on the active waiting list than in other States and this has been evident for some years.

Is it easier to add to the waiting list? Are non-transplantable patients not being dialysed? Is there some unique demographic pattern that produces a more transplantable group of patients receiving dialysis treatment? What are the consequences of a larger pool for one State in regard to donor graft distribution?

Is the low transplantability of dialysis patients in Queensland over the last few years a reverse side of the questions raised for New South Wales/ACT?

AUSTRALIA

Only 30% of all 5206 patients were reported to be on the active waiting list. The majority of patients dialysed at 31st March were not likely to be transplanted because of poor general health, non-renal disease, malignancy, or age. Of those considered for the waiting list, a small group were temporarily off the list (3%), and a larger group were awaiting assessment for the list (8%). See Figure 92.

However, in the age group <65 years, the majority of the 3255 patients were on the active waiting list (46%), temporarily off the list (4%), or awaiting assessment (12%). A small group (5%) were reported to have refused the option of transplantation: 4% of those not transplanted, 9% of those previously transplanted. See Figure 93.

The highest proportion of patients on the waiting list, was recorded amongst those using haemodialysis at

home (65%) or at a "satellite" centre (45%). There was a lower proportion on the list among the 793 patients using CAPD (42%), and as expected, of those having haemodialysis in a hospital unit (only 36%). There was a relatively high number of patients awaiting assessment amongst those using hospital haemodialysis (12%), or CAPD (17%). Patient refusal was higher amongst those using home haemodialysis. Poor general health was more common amongst hospital haemodialysis and CAPD patients.

The number of patients on the waiting list in each age group is shown in Figure 97 and 98. Most young patients (76%) and adults (57%) were on the waiting list as were a slight majority of the middle aged (49%). Only a minority (29%) of those in the large group 55-64 years, and a very low (6%) of those in the rapidly growing group 65-74 years were on the waiting list. See Figure 99.

INDIVIDUAL AUSTRALIAN STATES

For detail of dialysis treatment and likelihood of transplantation in each State see Figure 94.

The number of patients in each State on the waiting list is shown in Figure 97 and these patients as a proportion of all dialysis patients is shown in Figure 98. In the Northern Territory only 15% of all patients were on the active list: with none in the age group 25-34 years. For age related details see Appendix II.

As expected, most young dialysis patients were likely to be transplanted. The proportion of middle aged patients (45-54 years) likely to be transplanted ranged from 18% (Northern Territory) to 62% (New South Wales/ACT) and for those 55-64 years ranged from 17% (Northern Territory) to 37% (New South Wales/ACT). Few elderly patients were likely to be transplanted: 8% New South Wales/ACT and Queensland.

The proportion of all patients in each State <55 years who were on the waiting list is shown in Figure 100.

NEW ZEALAND

Of 1034 patients dialysing at 31st March, (32%) were awaiting transplantation; <55 years old, there were 239 of 541 patients (44%). A further 2% were temporarily off the list and 16% were awaiting assessment. Of patients <65 years, 26% were unfit (hospital haemodialysis 39%, satellite haemodialysis 19% and CAPD 27%). See Figures 95 to 100.

Figure 92

Australia

Likelihood of Transplantation 31-Mar-98

Likelihood of Transplantation			Haemodialysis			Peritoneal Dialysis			
						CAPD	PD		
			Hosp.	Home	Sat.			Hosp.	Home
On Waiting List	1562	30%	316	362	457	351	1	75	0
Temporarily Off List	155	3%	47	19	57	25	0	7	0
Awaiting Assessment	434	8%	113	33	117	152	3	16	0
Patient Refusal	211	4%	44	41	51	66	0	9	0
Medically Unfit	1291	25%	480	83	330	351	7	40	0
Malignancy	129	3%	47	28	29	21	1	3	0
Age	1317	25%	414	47	393	433	7	23	0
Other Reasons	107	2%	31	9	42	22	1	2	0
Total	5206	100%	1492	622	1476	1421	20	175	0

Figure 93

Australia

Likelihood of Transplantation: Age <65 years 31-Mar-98

Related to Previous Transplantation

Category	No Previous Transplant	Previous Unsuccessful Transplant	Total
	(2665)	(590)	(3255)
On Waiting List	46%	45%	46%
Temporarily Off List	4%	8%	4%
Awaiting Assessment	12%	9%	12%
Patient Refusal	4%	9%	5%
Medically Unfit	26%	20%	24%
Malignancy	2%	4%	3%
Age	3%	1%	3%
Other	3%	4%	3%

Related to Site and Method of Dialysis

Category	CAPD	PD	Hosp.HD	Home HD	Sat. HD
	(793)	(146)	(814)	(541)	(961)
On Waiting List	42%	51%	36%	65%	45%
Temporarily Off List	2%	4%	5%	4%	6%
Awaiting Assessment	17%	11%	12%	6%	11%
Patient Refusal	5%	6%	3%	7%	5%
Medically Unfit	26%	22%	35%	12%	23%
Malignancy	2%	2%	3%	4%	2%
Age	3%	2%	2%	1%	4%
Other	3%	2%	4%	1%	4%

Likelihood of Transplantation: Age <65 years 31-Mar-98
Related to Site and Method of Dialysis - Australian States

	CAPD	PD	Home HD	Hosp. HD	Sat. HD	Total
Queensland	(143)	(36)	(20)	(236)	(43)	(478)
On Waiting List	39%	53%	60%	32%	37%	37%
Temporarily Off List	3%	3%	5%	8%	9%	6%
Awaiting Assessment	28%	11%	0	14%	19%	18%
Patient Refusal	7%	8%	5%	5%	7%	6%
Medically Unfit	22%	22%	15%	35%	23%	28%
Malignancy	0	3%	0	1%	0	1%
Age	<1%	0	0	0	0	<1%
Other	1%	0	15%	6%	5%	4%
New South Wales / ACT	(290)	(63)	(355)	(236)	(254)	(1198)
On Waiting List	44%	56%	72%	47%	59%	57%
Temporarily Off List	3%	8%	3%	2%	3%	3%
Awaiting Assessment	12%	6%	4%	8%	2%	7%
Patient Refusal	6%	3%	7%	3%	4%	5%
Medically Unfit	29%	22%	10%	34%	24%	23%
Malignancy	1%	2%	3%	3%	3%	2%
Age	2%	0	<1%	<1%	1%	1%
Other	3%	3%	1%	3%	3%	2%
Victoria	(168)	(23)	(125)	(155)	(373)	(844)
On Waiting List	40%	35%	51%	29%	43%	41%
Temporarily Off List	3%	0	4%	3%	4%	3%
Awaiting Assessment	11%	13%	12%	15%	11%	12%
Patient Refusal	7%	4%	6%	2%	4%	5%
Medically Unfit	27%	31%	16%	36%	23%	26%
Malignancy	2%	4%	5%	6%	2%	3%
Age	8%	9%	4%	8%	10%	8%
Other	2%	4%	2%	1%	3%	2%
Tasmania	(21)	(4)	(0)	(32)	(12)	(69)
On Waiting List	38%	(50%)	0	32%	67%	41%
Temporarily Off List	0	0	0	6%	8%	4%
Awaiting Assessment	10%	0	0	6%	0	6%
Patient Refusal	14%	25%	0	3%	17%	10%
Medically Unfit	33%	25%	0	41%	0	31%
Malignancy	0	0	0	9%	8%	6%
Age	5%	0	0	0	0	1%
Other	0	0	0	3%	0	1%
South Australia	(31)	(4)	(12)	(48)	(94)	(189)
On Waiting List	55%	25%	42%	27%	47%	42%
Temporarily Off List	0	0	8%	6%	11%	7%
Awaiting Assessment	19%	50%	8%	17%	19%	19%
Patient Refusal	0	0	17%	6%	2%	4%
Medically Unfit	19%	0	17%	33%	15%	20%
Malignancy	0	0	0	2%	4%	3%
Age	3%	25%	0	0	0	1%
Other	3%	0	8%	8%	2%	4%
Northern Territory	(13)	(2)	(0)	(5)	(110)	(130)
On Waiting List	15%	50%	0	20%	16%	17%
Temporarily Off List	8%	0	0	0	16%	15%
Awaiting Assessment	54%	0	0	20%	26%	28%
Patient Refusal	0	50%	0	0	4%	4%
Medically Unfit	15%	0	0	40%	24%	23%
Malignancy	0	0	0	0	0	0
Age	0	0	0	20%	1%	1%
Other	8%	0	0	0	13%	12%
Western Australia	(127)	(14)	(29)	(102)	(75)	(347)
On Waiting List	43%	65%	55%	34%	52%	44%
Temporarily Off List	<1%	0	7%	8%	1%	3%
Awaiting Assessment	19%	21%	0	17%	7%	14%
Patient Refusal	4%	0	17%	3%	7%	5%
Medically Unfit	24%	14%	14%	31%	27%	26%
Malignancy	6%	0	7%	2%	0	3%
Age	<1%	0	0	1%	1%	1%
Other	4%	0	0	4%	5%	4%

() Number of Patients

Figure 95

New Zealand

Likelihood of Transplantation 31-Mar-98

Likelihood of Transplantation			Haemodialysis			Peritoneal Dialysis			
			Hosp.	Home	Sat.	CAPD	PD		
							Hosp.	Home	Sat.
On Waiting List	328	32%	50	108	7	147	0	16	0
Temporarily Off List	19	2%	2	5	0	7	0	5	0
Awaiting Assessment	159	16%	45	16	3	90	0	5	0
Patient Refusal	116	11%	14	13	2	85	0	2	0
Medically Unfit	301	29%	91	32	3	168	0	7	0
Malignancy	13	1%	5	4	0	4	0	0	0
Age	65	6%	20	2	0	43	0	0	0
Other Reasons	33	3%	6	12	1	14	0	0	0
Total	1034	100%	233	192	16	558	0	35	0

Figure 96

New Zealand

Likelihood of Transplantation: Age <65 years 31-Mar-98

Related to Previous Transplantation

Category	No Previous Transplant	Previous Unsuccessful Transplant	Total
	(678)	(126)	(804)
On Waiting List	37%	51%	39%
Temporarily Off List	2%	6%	2%
Awaiting Assessment	18%	6%	16%
Patient Refusal	11%	11%	11%
Medically Unfit	28%	16%	26%
Malignancy	1%	3%	1%
Age	<1%	0	<1%
Other	3%	7%	4%

Related to Site and Method of Dialysis

Category	CAPD	IPD/CCPD	Hosp.HD	Home HD	Sat. HD
	(402)	(34)	(179)	(173)	(16)
On Waiting List	35%	47%	26%	61%	44%
Temporarily Off List	2%	15%	1%	3%	19%
Awaiting Assessment	18%	12%	22%	8%	0
Patient Refusal	15%	5%	7%	6%	13%
Medically Unfit	27%	21%	39%	13%	19%
Malignancy	<1%	0	2%	2%	0
Age	<1%	0	0	0	0
Other	3%	0	3%	7%	5%

Figure 97

Australia and New Zealand

**Patients Awaiting Transplant
Age Related 31-Mar-98**

State	Age Groups								Total
	00-04	05-14	15-24	25-34	35-44	45-54	55-64	65-74	
Queensland	0	4	8	24	47	49	18	18	195
New South Wales/ACT	2	9	49	97	158	204	159	49	727
Victoria	0	5	19	57	91	105	67	7	351
Tasmania	0	1	2	6	8	9	2	0	28
Northern Territory	0	0	2	0	7	7	6	0	22
South Australia	0	1	2	15	17	25	20	4	84
Western Australia	2	2	7	42	28	46	26	2	155
Australia	4	22	89	241	356	445	325	80	1562
New Zealand	0	4	22	49	82	82	75	14	328

Figure 98

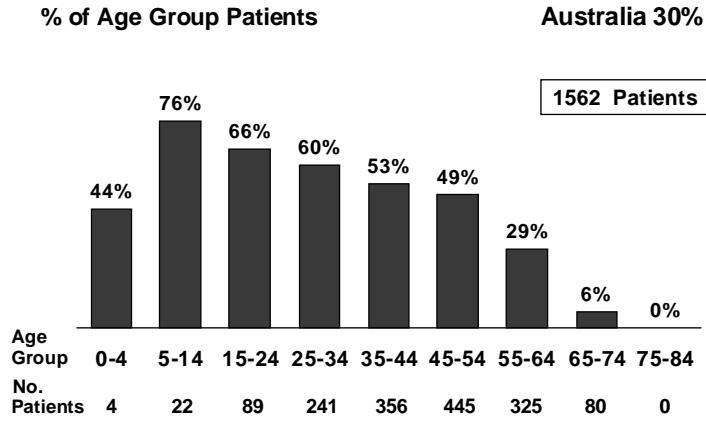
Australia and New Zealand

**Proportion (%) of Dialysis Patients Awaiting Transplant
Age Related 31-Mar-98**

State	No. of Pts.	Age Groups								Total
		00-04	05-14	15-24	25-34	35-44	45-54	55-64	65-74	
Queensland	n=807	0%	100%	44%	36%	43%	40%	28%	8%	24%
New South Wales/ACT	n=1991	67%	82%	75%	77%	66%	62%	37%	8%	37%
Victoria	n=1328	0%	71%	61%	55%	59%	45%	21%	2%	26%
Tasmania	n=109	0%	100%	100%	67%	45%	10%	0%	0%	26%
South Australia	n=314	0%	33%	40%	54%	45%	45%	34%	5%	27%
Northern Territory	n=148	0%	0%	67%	0%	18%	18%	17%	0%	15%
Western Australia	n=509	50%	67%	64%	75%	36%	43%	29%	2%	30%
Australia	n=5206	44%	76%	66%	60%	53%	49%	29%	6%	30%
New Zealand	n=1034	0%	33%	56%	50%	54%	34%	29%	7%	32%

Figure 99

Proportion of Patients Awaiting Transplant 31-Mar-98



Proportion of Patients Awaiting Transplant 31-Mar-98

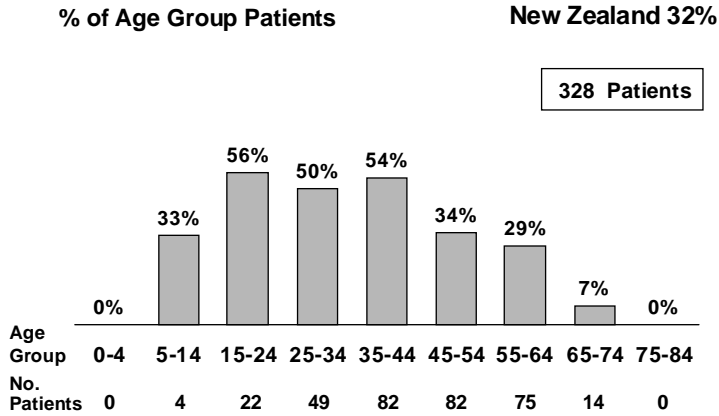
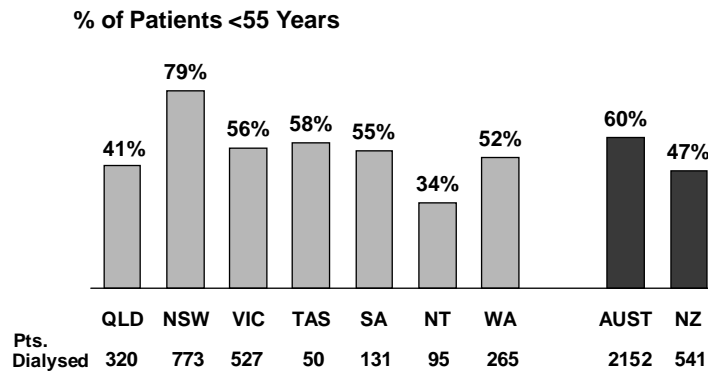


Figure 100

Proportion of Patients <55 Years Awaiting Transplant 31-Mar-98*



* Includes patients temporarily off the waiting list